

ERP Takes On A Bigger Role In Managing Supply Chains

BY [ELLIOT MARAS](#) ON MAY 17, 2016



“Ball of confusion – That’s what the world is today.” The Temptations were singing about the turbulence of the late 1960s. Little did they know how well these lyrics would describe the record keeping requirements facing food logistics decision makers in 2016.

All players in the food supply chain—growers, processors, packers, distributors, transporters, retailers and foodservice operators—have to collect more product information than ever and organize it for more uses. Software systems help companies manage these tasks. But as companies grow and the tasks become more complex, companies turn to enterprise resource planning (ERP) software, which allows them to manage data for multiple business activities such as product planning, cost analysis, manufacturing, service delivery, marketing, sales and more.

ERP brings an accounting context to all types of operational software. Hence, it can provide a powerful management tool.

What ERP can offer

An ERP system supports the processes that are unique to a company's operation. Data management and analysis needs vary based on a company's focus within the supply chain—i.e., supplier, distributor or retailer. The requirements also vary within these segments as procedures and product lines run a wide gamut.

Nevertheless, most food supply chain players find themselves facing the need to organize more data on account of several contemporary factors. They include stricter regulations, more extensive customer requirements, more business partnerships, investor information requests, SKU growth, more product attributes, and a growing omni-channel.

Food companies need to support multiple units of measure, random weight items, extensive pricing and costing models, possible production and packing requirements. They also have to support various sales channels with different needs.

One ERP platform may not address the needs of every food company.

There is a big difference between the processes of a fresh bakery and a frozen bakery. The latter's supply chain is much simpler than the former's. The sales, purchasing and finance functions will be similar, but not the manufacturing and distribution functions. The metrics used in tracking labor in the manufacturing and distribution operations will differ depending on the equipment involved.

The meat, seafood and cheese industries have to track variable weights that are not required in other food segments.

Product attributes—which are growing due to changing customer tastes—also vary among food groups.

The amount of information sharing among different supply chain players has increased, enhancing the need for ERP in all segments.

Manufacturing needs

While all players in the food supply chain have to manage more data for more uses, the complexities are most acute in the manufacturing segment due to the volume of ingredients used. And while the complexities are less extensive for the distribution, retail and transportation sectors, these players rely on data supplied by the manufacturing sector for many of their own data needs.

Food ERP software manages items such as catch weights, a measurement that is somewhat unique in the food processing segment. The product is delivered to the processor in a different weight unit than the processor sells it to his retail customer. This is an important financial measurement for food processors.

Growers and processors note that retailers are asking for lot traceability and shelf life information. Retailers are also requesting label information such as product attributes, rebates and promotions.

Manufacturer experiences vary

For **Berner Food & Beverage Inc.**, a Dakota, Ill.-based manufacturer that supplies retailers nationwide, their ERP became especially important after the company was acquired by a private equity firm. The new owner provided a capital infusion that enabled the company to add products and customers at a faster rate than they were previously used to, says Troy Grove, the chief information officer.

“Your ERP system must be able to change right away,” Grove says. “It has to be flexible enough to take in all those products and processes.” Berner Food & Beverage uses the Ross ERP from **Aptean**, an Alpharetta, Ga.-based ERP provider, which Grove describes as a more vertical ERP provider than some of the larger companies that target multiple industries.

This vertical focus is important to Grove because of some unique needs in food processing. When configuring a new product, the company has to organize processes for managing ingredients, palletization, packaging and distribution. Depending on the variables of a particular product, there can be up to 32 processes to manage. The ERP allows the company to interface data to the systems that use that particular data.

“It [the ERP] becomes our one system of the truth,” he says.

Berner Food & Beverage is able to use the Ross ERP modules for inventory control, data collection and warehouse management.

ERP supports growth

In 2013, **Navitas Naturals**, a Novato, Calif.-based manufacturer and distributor of organic “superfoods” ranging from coconut chips and dragon fruit slices to hemp protein powder, realized it needed an ERP system capable of handling the growing volume of its sourcing, sales and distribution, as well as its need to monitor its compliance with requirements throughout the supply chain. The management team also needed better visibility into the company’s dispersed operations to predict sales, logistics and inventory needs.

Navitas Naturals chose to move its financials, supply chain, order management and inventory management to **NetSuite Inc.**'s cloud-based, integrated ERP platform. The ERP provides the flexibility to scale activity and activate new functions as needed. Being in the cloud also meant no in-house IT costs.

The lot tracking capabilities of San Mateo, Calif.-based NetSuite have enabled Navitas Naturals to track about 250 SKUs of raw materials and finished goods, while using the system's manufacturing management capabilities for assembling raw materials sourced directly from farmers into its production facility.

"The data we're able to capture with NetSuite is extremely robust, and we have great flexibility to customize reports," says Ira Haber, Navitas Naturals chief operating officer.

Navitas Naturals has eliminated the speed and scalability limitations of QuickBooks while gaining an integrated, real-time solution for greater efficiency and visibility. The company now has end-to-end visibility into supply chain, product and distribution operations; real-time data to provide alerts when problems occur and to make smart decisions using up-to-the-minute information; and easier access by employees, partners and customers to the processes and data, whether it is to place an order, check an account, run a report or analyze data.

Navitas Naturals uses OzLINK shipping software from Westborough, Mass.-based **Oz Development** to streamline fulfillment in excess of about 30,000 units a day; Minneapolis, Minn.-based **SPS Commerce** for EDI, Bellevue, Wash.-based **Concur Solutions** (part of **SAP**) for expense reporting; and San Jose, Calif.-based **Upaya – The Solution Inc.** for scripting and order processing.

Reinhart Foods Ltd., a Toronto, Canada-based vinegar producer, until recently relied on a legacy accounting system and spreadsheets. But without an integrated solution, access to actionable data was difficult. The company needed to improve access to data in its manufacturing/distribution operation. Management believed real-time data would ensure the company stocks the right product mix in the correct quantities.

Reinhart installed computer workstations on its production floor to facilitate the collection of batch and lot information. "Previously, the data entry happened days later in the front office," says Tim Quinlan, Reinhart's vice president of production. "Now we're collecting that data when and where it's happening."

The company has integrated its entire manufacturing process, from order entry and shipping through demand forecasting. The Sage X3 ERP from Atlanta, Ga.-based **Sage Software Inc.** provides material requirements planning capabilities, access to accurate, up-to-date information, and tight lot control.

With complete forward/backward lot traceability built into the functionality of the ERP, Reinhart Foods knows that in the event of a recall, it can respond quickly. Comprehensive lot tracking ensures safety, quality and compliance.

“We knew one of our success factors was based on all employees from the shop floor to the board room being able to comfortably engage with the system,” Quinlan says. “This would enable us to achieve quality data, in real time, with all team members working from the same playbook.”

Since deploying the Sage X3 ERP, inventory accuracy has improved, and routine tasks have become streamlined. “We went from dealing with yesterday’s problems to tackling today’s challenges,” says Quinlan. “Solving issues in the moment is much more effective and efficient for a business.”

Better space utilization

Packom Sweets LLC, a candy maker with production facilities in Wayne, N.J. and Belgrade, Republic of Serbia, has been able to utilize its production space more efficiently as a result of deploying JustFoodERP from Toronto-based **IndustryBuilt**. Packom Sweets produces a sugar-free, vitamin-enriched breath freshener in seven flavors globally.

Peter Dobric, Packom Sweets CEO and co-founder, says he was concerned that as the company grew, there would be duplication of data which would hamstring efficiencies. Another concern was managing data in different languages.

The ERP integrates the inventory management with the production operation, Dobric says. It forecasts raw material needs based on inventory needs. It also tracks lots in real time, which Dobric sees as critical in meeting food safety recordkeeping rules.

Dobric says space utilization was important since the company has to shift production around in its factories, a condition that smaller manufacturers are more likely to have to deal with. “It’s good at applying itself to manufacturers that have multiple manufacturing processes in non-dedicated space,” Dobric says.

“All lines point to finance in the end,” says Dan Rowe, product manager at IndustryBuilt. An ERP system allows a company to better understand all costs going into a business activity. A manager can factor freight, raw materials, labor, equipment maintenance to determine the real cost of serving the customer. “If you have a single [integrated] system, you get a much better picture of how the business is performing,” he says.

Rowe was one of several observers who cited the influence of customer information requirements in driving more manufacturers to ERP systems. Major retailers are requiring lot traceability information from suppliers.

“It’s usually something like that that causes them [manufacturers] to recognize the need for an integrated system,” Rowe says. When a manufacturer lands a big order, they can suddenly find they need to triple their production but will not have the infrastructure in place to support it. In such a case, an ERP system will be critical.

Focus: lot traceability

One area that retailers have focused suppliers’ and distributors’ attention on is lot traceability.

Lot traceability was a key reason that **Freedom Fresh LLC**, a Miami, Fla.-based produce and dairy distributor, deployed an ERP system a few years ago, says Jimmy Perez, vice president of operations. Another reason was the fact that one solution included both the ERP and WMS software. The company needed a system that could manage the warehouse, track product attributes for 2,000 SKUs, provide more analysis and support 24/7 delivery.

Perez is currently integrating the ERP software from Woodridge, Ill.-based **Produce Pro Inc.** with the routing software. He sees the integration of different software systems as the company’s main challenge as it expands its customer base.

Lot labels are used for raw materials so that a processor can scan them for use in production batches, then track the finished products those batches produced, says Joe Scioscia, vice president of sales at **VAI**, the Ronkonkoma, N.Y.-based ERP software provider. “By doing this, if an ingredient in the chain is suspect, the processor can quickly determine which specific batches contain the tainted ingredient and which finished products were produced that may have been shipped to customers.”

The ERP also makes managing shelf life easier. “By tracking lots, users can also better control shelf life dates of the product,” Scioscia says.

ERP: The bigger picture

Given the culture of many food companies, decision makers are oftentimes more comfortable allocating investments in equipment than in software. Rowe of IndustryBuilt says production equipment should not be the first area of investment for a growing company. He has seen cases where a manufacturer purchases a piece of equipment they don’t need after they integrate their manufacturing needs with their inventory.

One of the most important benefits of ERP is gaining a comprehensive view of the business. A bottleneck in the put-away operation might appear to be caused by the warehouse where in reality it might be the production area, Rowe says.

Rowe doesn't downplay the software investment. In addition to having new software, a company will also need to have some assistance with the installation and training if there isn't a qualified IT staff. One of the key benefits of software as a service (SaaS) is not needing an IT staff.

New data needs emerge

Connecting small, local suppliers to the supply chain is becoming more important as food brands move to embrace local, organic, small batch and sustainable growers, says Karen Lynch, vice president and global head of the Downers Grove, Ill. wholesale distribution industry business unit of **SAP America Inc.**, located in Newton Square, Pa. "In countries like Africa, smallholders are a critical source for raw goods such as cocoa and coffee beans," she says. "This detailed documentation of market information prevents arbitrary prices and handling fees, ensuring that farmers get a fair price. Farmers gain direct access to export markets by improving their competitive position and bargaining power, and increasing margins. Similarly, exporters and the end buyers (even down to consumers) have a growing interest in tracing the origin of their beans and ensuring fair trade."

As inventory data schemes such as **GS1** based in Brussels, Belgium, emerge, supply chain managers are finding adopting these tools is challenging since not all of suppliers and customers are in compliance with these standards. Hence, it is not unusual to need different sets of records for suppliers and customers that use legacy data systems.

Tracking inventory with more than one data scheme can present an organizational challenge that ERP software can make easier to manage.

NetSuite Inc.'s recent acquisition of Wexford, Pa.-based **IQity Solutions** creates a single-cloud software system to meet the needs of both discrete (production of distinct items) and batch process manufacturers. The system covers manufacturing-specific needs such as shop floor and project control, multi-site and multi-division operations and warehousing, demand planning, production engineering, lot and serial control, standard costing, bill of materials and assembly builds.

Visibility is important in managing co-manufacturing relationships, a growing trend in the food industry, says Dave Gustovich, area vice president at NetSuite. Food manufacturers often find co-manufacturing partnerships make sense when expanding product lines to niche areas like non-GMO products.

The same holds true when looking to expand omni-channel capability. Cloud-based reporting and analytical tools help manufacturers open new direct-to-consumer sales channels while growing the traditional direct-to-distributors business, Gustovich, says.

“ERP systems can successfully manage omni-channel requirements because system capabilities align with meeting customer needs, which allow businesses to optimize processes and create tailored shopping experiences,” SAP’s Lynch says. In order for companies to implement a successful omni-channel approach, they must have access to real-time data and inventory management. “And because ERP systems provide enhanced collaboration and visibility across supply chains, companies are able to adjust business models to better service customers in real time.”

NetSuite’s Gustovich says private equity investment is forcing more food manufacturers to collect more operating and financial data, which reinforces the need for enterprise data management, particularly in improving shop floor visibility. “It’s all about giving visibility,” he says.

Jill Smith, director of Ross Product Line at Aptean, agrees that some of the product attributes that manufacturers are pursuing is leading to more manufacturing outsourcing. A manufacturer who wants to produce a gluten-free product might not be able to use his existing facility to produce that product.

These requirements can also affect how the company delivers the product to its customer. A delivery might go to a DC, a wholesale distributor or to a retailer depending on a product’s unique requirements. In all cases, control of supply chain visibility becomes critical.

Foodservice grows

The growth of the foodservice channel, a trend that has been gaining momentum for years, brings even more demand for real-time data management to food manufacturers. Foodservice customers don’t order as much volume or variety, notes Jean Huy, Sage’s vice president of global product marketing, but these customers have stricter waste control requirements.

And while the foodservice volume is less than that of a typical retail customer, the orders are less predictable, making demand forecasting more critical. Predictive analysis is especially important serving foodservice customers.

Wholesalers have unique needs

Wholesale distributors, which play a bigger role in foodservice than in retail, are finding ERPs critical in improving safety and managing larger inventories across larger supply chains. Distributors are adding more 24/7 deliveries and offering faster deliveries.

Saladino's Foodservice, based in Fresno, Calif., switched ERPs several years ago when they landed a foodservice customer that required online ordering, says Craig Urrizola, the company's chief information officer. Serving restaurants in California, Arizona, Nevada and Oregon, Saladino's Foodservice switched to an ERP from Duluth, Ga.-based **NCR Corporation**., which not only provides online ordering but is also more scalable, supporting the company's growth.

Urrizola says some ERP solutions are more tailored to distribution than others. NCR's online ordering is suited to a business like his where customers place large and numerous orders. In addition, it makes order sequencing easier. Saladino's Foodservice can allow its customers to order based on how their own restaurants are organized.

Sysco Corp., the Houston, Texas-based foodservice distributor, announced in late February that it plans to add functionality to its existing ERP and remove an ERP used by 12 of its operating companies. CEO Bill DeLaney said the evolution of technologies has made it not only possible, but preferable in many instances to renew and modernize existing systems rather than deploy totally new platforms.

Foodservice customers in particular are asking for more product attributes, says Sean Buchanan, president of **Black River Produce** and **Black River Meats**, a North Springfield, Vt.-based distributor. These include organic, non-GMO, ABF, animal welfare and more. The company recently switched to an ERP from VAI.

"We track everything; lost sales opportunities, shrink, credits, GP (gross profit), cases per drop, customer sales, spiffs, vendor analysis, customer ranking," Buchanan says. "If there is data to run, analytics can do it. The next phase is to incorporate this into dashboards for each department so that they can see sales voids and allow all of our staff to be more aggressive."

“Some of these things take time to program and work out, but our shrink has been cut in half, our customer tosses are half, and our credits are now half of what they were last year,” he says. “We have seen an dramatic operational improvement as well as better customer delivery.”

Cheney Brothers Inc., a Riviera Beach, Fla.-based foodservice distributor, sought to increase supply chain visibility with access to real-time data, improve management of vendor cost recovery from rebates and deviations, and automate manual processes to reduce the number of new employees, according to SAP’s Lynch.

The implementation of an SAP ERP system allowed for alternative product suggestions that provided higher rebates, greater incentives and fewer product returns, Lynch says. It also centralized systems that increased productivity by better servicing customers’ needs through real-time data. Cheney Brothers improved sales by 15 percent and productivity by 50 percent.

“Without the benefits of an ERP solution, the distributor will not typically have insight to the key performance indicators (KPIs) that drive a well-managed business,” says Jenna Beck, vice president of global marketing for Phoenix, Ariz.-based **AFS Technologies**. As such, size (revenue, SKU count or square footage) doesn’t drive the need; rather, it is the desire to be able to capture, interpret and react to the information gathered in an ERP that is typically the driving force behind adopting ERP solutions.

Most food distributors initially focus on improving internal processes, Beck says. “ERP provides enhanced functionality to increase productivity and efficiencies so you have greater control in optimizing inventory, data and cash flow.”

It also offers a platform to leverage other solutions within the ERP software suite to better manage the external processes, such as tracking a product’s activity from warehouse to customer delivery, supporting just-in-time electronic delivery confirmation. “Another example is using EDI capability with AFS Data Exchange to automate processes with trading partners and third-party warehouses, as well as monitoring for discrepancies in the data and address exceptions,” says Beck.

Managing manufacturer rebates has become a bigger requirement for foodservice distributors, notes Mike O’Brien, vice president of sales at Sweden-based **International Business Systems Inc.**, as manufacturers have found this pricing strategy to be more competitive. The processes involved in managing chargebacks and rebates is highly technical. “All that can be automated in an ERP,” O’Brien says. As a distributor, “you’re not going to win business in the food industry if you don’t have capability like that.”

Traceability requirements continue to expand, requiring foodservice distributors to track more information, notes Chris Anatra, president of Branford, Conn.-based **NECS Inc.**, provider of the entrée ERP solution for foodservice distribution. Starting June 20, ground beef processors are required to track and maintain specific information about their grinding activities under new **U.S. Department of Agriculture** regulations managed by its Food Safety and Inspection Service (FSIS).

As warehouse technology advances, ERP systems allow a company to integrate with data generated by new technologies. Passive RFID labels (called “Smart Labels”) can prevent the need for manual cycle counting, manual barcode scanning, inventory accountability and even theft prevention, Anatra notes. Niche software systems such as processing with full traceability, rebate tracking, advanced routing, smart glass warehouse picking and even cycle-counting drones promise even more efficiencies, but a company needs an ERP system to make use of these capabilities.

Anatra points to the GS1 barcode as a major warehouse advancement. “The GS1 standards have been so helpful to the industry,” he says.

Growth is a driving factor for all supply chain segments in the United States, given the current state of the economy, says Tom Muth, senior product marketing manager at Austin, Texas-based **Epicor Software Corporation**. This is forcing companies to expand into new markets, geographically and product-wise.

Texas Grocer Relies On ERP To Improve Data Integrity And Visibility

ERP has played a key role in improving data integrity and visibility for Brookshire Grocery Company, a Tyler, Texas-based company operating more than 150 supermarkets across three southern states, three distribution centers, and five manufacturing facilities (bakery, dairy, water/ice, ice cream and yogurt). The company recently completed the first of three phases in creating a “digital core,” says John D’Anna, executive vice president and chief strategic officer.

The company first deployed the SAP ERP’s Human Capital Management solution to integrate and automate operational human resources processes.

Brookshire Grocery then focused on increasing data integrity and visibility to ensure it had accurate, consistent and actionable information to better understand and serve shoppers. This gave the company a deeper

understanding of shoppers, and flexibility to quickly adjust inventory and distribution to shopper demand, translated into increased sales.

"By 2020, it is projected that millennials will go from 5 percent of the buying power to close to 20 percent of buying power. This generation grew up with cell phones in their hands, with laptops, with tablets—they are very digitally engaged," says D'Anna. "Our business has to simplify everything for that customer."

ERP Requires A Focus On Training

As with all types of software, the ERP system is only as useful as the people who work with it.

"The most difficult part is getting your team to understand they need to change to remain competitive and that they must change," says Sean Buchanan, president of Black River Produce and Black River Meats, a North Springfield, Vt.-based distributor. "Today I sat with our receiving team and worked through some issues where I physically showed them they scanning records of cutting corners and explained that they needed to adjust. Their manager was accountable and by the end of the day, everyone had been retrained and a signed off training went to their file with the understanding that the next time would be a write up."

For More Information:

AFS Technologies, afsi.com
Aptean, aptean.com
Concur Solutions, concursolutions.com
Epicor Software Corporation, epicor.com
GS1, gs1.org
IndustryBuilt, industrybuilt.com
International Business Systems Inc., ibs.net
IQity Solution, iqitysolutions.com
NCR Corporation, ncr.com
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VAI, vai.net
